



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/679,813	10/05/2000	Steven A. Lapierre	052144-5001	8794

9629 7590 08/10/2004  
MORGAN LEWIS & BOCKIUS LLP  
1111 PENNSYLVANIA AVENUE NW  
WASHINGTON, DC 20004

EXAMINER

SNAPP, SANDRA S

ART UNIT PAPER NUMBER

3624

DATE MAILED: 08/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/679,813	LAPIERRE, STEVEN A.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Sandra Snapp	3624	<i>MS</i>

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 20 April 2004.  
 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.  
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
 6) ☒ Claim(s) 1-19 is/are rejected.  
 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \* c) ☐ None of:  
         1. ☐ Certified copies of the priority documents have been received.  
         2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
         3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
     \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Response to Amendment***

This Office Action is prepared in response to the Amendment filed 4-20-04.

Currently, claims 1-19 are pending in this application.

***Drawings***

The objection to the drawings previously given remains since a new set of drawings had not yet been received by the Patent Office in response to the previously given objection.

***Claim Rejections - 35 USC § 101***

The previous rejection of claims 1-11 under 35 U.S.C. 101 has been successfully overcome with the amended claim language in the Amendment of 4-20-04.

***Allowable Subject Matter***

The previous indication of allowable subject matter for claims 12-19 is herein withdrawn in view of the following rejection.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 3624

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1-19 are rejected under 35 U.S.C. 102(e) as being anticipated by the Keiser et al. patent (US 6,505,174 B1).

The Keiser patent discloses a method for online trading assets via transactionally linked virtual markets comprising the steps of:

Defining attributes and behaviors of virtual markets (col. 9, line 14 through col. 10, line 24), placing individual sell and buy orders in the virtual markets (),

optionally defining cross-market trading strategies that will span at least two virtual markets and that define relationships between virtual markets (col. 10, line 30 through col. 11, line 38),

Art Unit: 3624

automatically generating orders for cross-market trading strategies and routing those orders to their respective virtual markets (col. 11, line 21 through col. 12, line 31), and

automatically matching and executing both individual orders and orders generated by cross-market trading strategies for virtual markets, in such a way that atomic execution of cross-market trading strategies is guaranteed (col. 11, line 21 through col. 12, line 31),

wherein at least part of the method is performed on one or more computer systems (col. 8, lines 11-62) (claim 1);

the attributes and behaviors of the virtual markets include asset types, payment dates, and payment factors (col. 9, line 14 through col. 10, line 24) (claim 2);

the attributes and behaviors of the virtual markets replicate those of conventional markets (col. 6, lines 49-55) (claim 3);

placing an individual buy and sell order includes specifying a total size of the order, a minimum allowable size of a partial execution of the order, a portion of the total size of the order that will be visible to others, and indication of which of the virtual markets the order is for, and the price of the order (col. 9, line 14 through col. 10, line 24) (claim 4);

specifying types of trading strategies (col. 9, line 14 through col. 10, line 24) (claim 5);

the types of cross-market trading strategies includes arbitrage, basket, and hedge (col. 4, lines 46-67) (claim 6);

Art Unit: 3624

specifying the virtual markets referenced by the cross-market trading strategies (col. 9, line 14 through col. 10, line 24) (claim 7);

defining formulae to calculate prices and amounts for each virtual markets referenced by the cross-market trading strategies based upon counterorders from other virtual markets (col. 10, line 30 through col. 13, line 23) (claim 8);

identifying a best counterorder for each initial buy or sell order (col. 10, line 30 through col. 13, line 33) (claim 9);

automatically generating new orders on behalf of the defined cross-market trading strategies (col. 10, line 30 through col. 13, line 33) (claim 10); and

automatically and continuously modifying orders as needed on behalf of the defined cross-market trading strategies in response to changes in the virtual markets referenced by the cross-market trading strategies (col. 10, line 30 through col. 13, line 33) (claim 11).

The Keiser patent also discloses a system for online trading of assets via transactionally linked virtual markets comprising:

A market creation mechanism to enable users to create a plurality of virtual markets (col. 8, lines 11-62),

A plurality of active market servers to support the operation of each of the created virtual markets (col. 8, lines 11-62),

An order creation mechanism to allow users to create, buy or sell orders related to the virtual markets (col. 8, line 11 through col. 10, line 24),

Art Unit: 3624

A strategy creation mechanism to enable users to define cross-market trading strategies and specify the virtual markets referenced by the cross-market trading strategies (col. 10, line 30 through col. 11, line 38),

A plurality of active strategy servers to generate new orders on behalf of the specified cross-market trading strategies and to dynamically coordinate with the plurality of active market servers to continuously monitor relationships between virtual markets and modify orders generated on behalf of cross-market trading strategies as needed in order to insure atomic execution of the cross-market trading strategies (col. 11, line 21 through col. 12, line 31), and

A linking mechanism to enable orders and counterorders from different servers to be linked (col. 8, lines 11-62) (claim 12);

An adapter that enables external systems to link to the system so that users in the system may select from and share orders with external liquid sources (col. 8, lines 11-62);

An order validation mechanism (col. 9, lines 14-20 and lines 49-54), and

A credit limit validation mechanism (col. 9, lines 38-48) (claim 13);

The order validation mechanism allows a host site to establish trading limits for the host site's accounts (col. 9, line 14 through col. 10, line 24) (claim 14);

The order validation mechanism validates each created new order against the trading limits, and once validated, sends the new order to at least one of the plurality of virtual markets (col. 9, line 14 through col. 10, line 24) (claim 15);

The credit limit validation mechanism allows host sites to establish mutual lines of credit for specified markets and use these lines of credit to act as guarantors when

Art Unit: 3624

matching orders that originate from different host sites (col. 9, line 14 through col. 10, line 24) (claim 16);

A plurality of access control servers to authenticate each user (col. 2, lines 25-44) (claim 17); and

The plurality of access control servers determine an authorized level of system access granted to each user before allowing each user to access the system (col. 2, lines 25-44) (claim 18).

The Keiser patent also discloses a system for online trading of assets via transactionally linked virtual markets comprising:

A plurality of client systems for entering orders by a client (col. 8, lines 11-62);

A plurality of order routers for determining which market for an existing plurality of markets the order is in and transmitting the order to a market server (col. 8, lines 11-62);

A plurality of market servers for matching the order with existing counterorders and monitoring the plurality of markets (col. 9 line 14 through col. 12, line 31); and

A plurality of strategy servers for generating new orders, and routing the generated orders to each market defined in a trading strategy and coordinating with the plurality of market servers to insure atomic execution of all orders that make up the trading strategy (col. 11, line 21 through col. 12, line 31) (claim 19).

### ***Conclusion***



Art Unit: 3624

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The Keiser, Ausubel, Segal, Fertik, Melkomian, Igglund, Bowman and Hauk patents all disclose various types of virtual market systems.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sandra Snapp whose telephone number is 703-305-6940. The examiner can normally be reached on Mon.-Thurs.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vincent Millin can be reached on 703-308-1065. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ss 



**VINCENT MILLIN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600**